U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT West Fertilizer Inc. - Removal Polrep Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VI

Subject: POLREP #14

Final

West Fertilizer Inc.

West, TX

Latitude: 31.8165640 Longitude: -97.0877630

To: Ragan Broyles, US EPA

Kelly Cook, TCEQ

From: Mark Hayes, Federal On-Scene Coordinator

Date: 5/8/2013

Reporting Period:

1. Introduction

1.1 Background

Site Number: Contract Number:

D.O. Number: Action Memo Date:

Response Authority: CERCLA Response Type: Emergency

Response Lead: Incident Category:

NPL Status: Non NPL Operable Unit:

Mobilization Date: 4/17/2013 Start Date: 4/17/2013

Demob Date: 5/3/2012 **Completion Date:**

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

Fire and explosion at a fertilizer formulation facility

1.1.2.1 Location

West, McLennan County, Texas

1.1.2.2 Description of Threat

The release of agricultural chemicals into the environment, which may impact human health.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The facility was destroyed in the fire and explosion, with the exception of four "bullet" tanks and a hopper car filled with ammonium nitrate. The ammonium nitrate gondola car was blown off the rail siding, damaged, and released powdered fertilizer onto the ground.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On April 17, 2013 a fire and explosion occurred at the West Fertilizer Company located in West, Texas. Local, state, and federal law enforcement and response personnel have responded to the incident. The U.S. EPA has mobilized personnel to the incident to conduct air monitoring activities upon request from Texas Commission on Environmental Quality (TCEQ).

The impact of the explosion has impacted an approximate ½ mile radius which includes residential homes, a nursing home, an apartment community and several schools.

2.1.2 Response Actions to Date

At 0000 hours on April 18, 2013 the EPA Airborne Spectral Photometric Collection Technology (ASPECT) aircraft conducted an overflight of the facility and surrounding area. Ammonia levels during the overflight were detected between 6 to 10 parts per million (ppm) at 650 feet downwind or southeast of the site and consistent with wind direction.

At 1208 hours on April 18, 2013, the EPA ASPECT conducted a second overflight of the facility and surrounding area. Ammonia levels during the overflight were detected southeast of the site and consistent with wind direction. The detections were at 6 ppm and 3 ppm.

Between 0430 to 0530 on April 18, 2013 the 6th Civil Support Team (CST) and Waco Fire Department HAZMAT conducted a Level B entry to deploy air monitoring instrumentation near the incident location. On April 18, 2013, TCEQ contractors performed an entry to assess a leaking anhydrous ammonia tank on-site. According to TCEQ representatives, the release was secured by closing a valve on one of the bullet tanks.

At 1155 hours on April 19, 2013, the EPA ASPECT conducted a third overflight of the explosion site and potentially affected areas to acquire aerial photography of the explosion site.

As of 1900 hours on April 19, 2013, EPA continues to perform air monitoring in residential areas around the site, including areas where search and rescue operations are on-going and areas affected by the evacuation order. Specific chemicals monitored included volatile organic compounds, ammonia, carbon monoxide, and lower explosive limit of methane gas. No significant levels were detected. EPA performed air monitoring within the facility boundaries during an ATF-led assessment of the incident. Air monitoring criteria included volatile organic compounds, ammonia, carbon monoxide, and lower explosive limit of methane gas. Monitoring instruments did not detect any of the listed parameters.

As of 2000 hours on April 20, 2013, EPA continues to perform mobile and stationary air monitoring in residential areas surrounding the site. Mobile air monitoring was conducted in residential areas, including areas planned to be re-opened to the public in the next few days. One stationary monitor was deployed at the high school southeast of the site, and was later moved to the apartment complex east of the site due to a change in wind direction. No significant levels of contaminants were detected. Search and rescue activities were complete on 4/19/2013. EPA prepared a Quality Assurance Sampling Plan for soil sampling in the area immediately surrounding the site to assess the concentrations of potential site related contaminants and coordinated with local officials, TCEQ, and ATF on sampling mission.

At 2040, TCEQ and Union Pacific railroad personnel began offloading the remaining anhydrous ammonia product from on-site tanks. The offloading of the anyhydrous ammonia was completed successfully at approximately 2130 hours and transported as product off-site to Waco, Texas. EPA conducted stationary air monitoring downwind of the transfer operations and is coordinated with TCEQ,

Union Pacific, Texas DEM, and the various law enforcement agencies.

On April 21, 2013, EPA collected soil samples from properties in the immediate vicinity of the site that are owned by the City of West and the West Independent School District. Samples were collected to evaluate the potential off-site presence of site related contaminants. A total of 12 composite soil samples were collected to be analyzed for pesticides. EPA continued mobile and stationary air monitoring. Mobile air monitoring was conducted in the residential neighborhoods near the site. No concentrations of air contaminants were detected above site action levels.

On April 22, 2013, EPA continued air monitoring activities with two stationary sites proximal to the facility and one mobile monitoring team that monitored in the neighborhoods west of the facility. Twenty-four hour air monitoring activities have been reduced to daylight operations only. The Federal Emergency Management Agency (FEMA) met with all federal agencies today en route to coordinate with State of Texas officials in Austin, TX.

On April 23, 2013 EPA continued air monitoring activities with two stationary sites proximal to the facility and one mobile monitoring team that monitored in the neighborhoods west of the facility. The EPA Region 6 Regional Administrator and the Chairman of the Texas Commission on Environmental Quality toured the fertilizer facility to assess current site conditions.

On April 24, 2013 EPA continued daytime air monitoring activities with two stationary sites proximal to the facility. EPA and TCEQ personnel met to discussed air monitoring reporting and debris management.

On April 24, 2013 EPA and TCEQ conducted an offsite assessment of an impacted area caused by storm water runoff from the West Fertilizer facility. TCEQ stated that the runoff occurred during a rainfall event following the incident. TCEQ is currently developing a sampling plan to assess and determine the extent of contamination.

On April 25, 2013 EPA continued daytime air monitoring activities with three stationary sites to the west and south of the facility. During the morning operational briefing of state and federal agencies, it was indicated that a system to allow evacuated residents to re-enter has been developed and displaced residents may be allowed to evaluate their homes as early as Saturday, April 27, 2013. EPA and TCEQ continue to coordinate air monitoring plans for the public in the vicinity of the damaged and evacuated homes during the re-entry process. FEMA has requested a meeting to discuss debris management with EPA and TCEQ tentatively scheduled for April 26, 2013. OSC Eric Delgado attended the West Firefighter Memorial Service at Baylor University with fellow response agency personnel working at the site.

On April 26, 2013 EPA continued daytime air monitoring activities with three stationary sites to the west and north of the facility. The northern monitoring site was added to provide a downwind site during south winds. The site is approximately one half mile north of the fertilizer facility. A debris coordination meeting was held at 0900 with EPA, Texas Division of Emergency Management (TDEM), Texas Forest Service (TFS), FEMA, TCEQ, Texas Department of State Health Services, and the McClennan County Emergency Manager (MCEM) representing the City of West. Different methods of demolition and environmental mitigation were discussed. A debris coordination meeting will be held at 1000 on April 27, 2013 with all of the above participants. FEMA will provide a debris management guidance document at that time. EPA provided FEMA, TDEM, and MCEM a copy of EPA OECA's Guidance for Catastrophic Emergency Situations Involving Asbestos to serve as a guide for regulatory compliance for upcoming demolition operations. Approximately 150 homes are damaged or destroyed as a result of the explosion as reported in the meeting.

Displaced residents will re-enter their homes beginning at 0700 on April 27, 2013. The incident management team has developed a re-entry plan that was distributed during the 1600 operational update meeting. Urban Search and Rescue teams, mental health workers and law enforcement personnel will be provided to assist the returning evacuees.

On April 27, 2013 EPA continued daytime air monitoring activities with three stationary sites to the west and north of the facility. The northern monitoring site was added to provide a downwind site during south winds. The site is approximately one half mile north of the fertilizer facility.

EPA representatives attended three meetings on April 27, 2013 that included the ATF operations briefing, the State operations briefing and a debris coordination meeting. ATF is ceasing activities early on April 27, 2013 to give investigators some time to rest and recuperate. ATF will not begin operations

until 1000 on April 28, 2013. The residents of affected neighborhoods were allowed to return to their homes from 0700 - 1900 on April 27, 2013. Displaced residents evaluated their homes and recovered personal belongings. The re-entry process will continue during the same time period on April 28, 2013.

On April 28, 2013 EPA continued daytime air monitoring activities with three stationary sites to the west and north of the facility. The northern monitoring site was added to provide a downwind site during south winds. The site is approximately one half mile north of the fertilizer facility.

Displaced residents were allowed into their homes for the second day (April 28, 2013). Displaced residents continued to retrieve personal belongings and evaluate homes. Commercial restoration companies have begun work in the affected neighborhood with the installation of blue roofs, removal of sheetrock and other tasks associated with restoration of homes in the neighborhood affected by the explosion. Volunteer groups assisted throughout the affected neighborhood assisting the displaced residents.

On April 28, 2013, EPA obtained the most recent total number of structures evaluated that have been damaged from the explosion. This total of 214 structures includes: residential structures; schools; nursing home; and businesses. The classification system is based on the percent of total damage to the structure and number of structures is as follows: 17 structures with no damage; 0 - 1% (6); 1 - 10% (1); 10 - 30% (15); 30 - 60% (34); 60 - 100% (50); 100% (81); and, unrated 10.

On April 29, 2013 during the morning State operations briefing, the demobilization plan for responding state agencies was announced. State law enforcement assets including Texas Department of Public Safety Troopers and Texas Parks and Wildlife Game Wardens are scheduled to demobilize today. As of 1800 hrs, few state law enforcement officers remained deployed in West.

As of April 29, 2013, displaced residents now have access to their properties from 0700 – 1900 daily. Residential waste from the affected properties is being placed in their respective yards and at the curb.

A debris management coordination meeting was held on April 29, 2013 with local, state and federal agencies. FEMA facilitated the meeting and provided a best management practices presentation.

April 30 - May 1, 2013 EPA continued air monitoring at three fixed locations in close proximity to the explosion site. Monitoring data continues to be within background levels. TCEQ contractors continued conducting air monitoring around the facility perimeter.

During the May 1, 2013 debris management meeting discussions focused on four areas: disposal of material staged in residential front yards and right-of-ways, demolition of structures, Household Hazardous Waste (HHW) and white good separation, and material disposal at a City-owned landfill.

May 2-8, 2013 ATF site investigations continued. TCEQ continued air monitoring activities for volatile organic compounds (VOCs) and ammonia around the perimeter of West Fertilizer Co. property.

On May 4 and 5, 2013 from 0800 hrs to 1800 hrs residents were allowed to drop off HHW at a designated staging area near a nursing home. TCEQ provided oversight of the HHW collection operations

TCEQ will coordinate with the City of West concerning HHW/debris segregation and disposal. The Texas Department of State Health Services (TDSHS) will coordinate with city officials and TCEQ concerning residential and commercial demolition activities.

EPA has attended multiple debris management meetings lead by FEMA to coordinate debris disposal of residential homes and public buildings that were structurally damaged as a result from the West Fertilizer facility explosion. TCEQ is coordinating with the City of West to determine an acceptable location for debris/HHW segregation and disposal.

TCEQ assessed areas offsite potentially impacted from stormwater runoff during multiple rainfall events following the West Fertilizer Co. incident. Results from water and soil samples collected by TCEQ indicated elevated levels of ammonia nitrogen and herbicides. TCEQ plans to mitigate the areas offsite impacted from stormwater runoff from the West Fertilizer Co. property.

TCEQ will coordinate with the Responsible Party's insurance representatives for the recovery of waste materials and products, potentially including ammonia nitrate from the hopper railcar, on the West

Fertilizer Co. property following the completion of ATFs site investigation.

On May 2 and 3, 2013 EPA START personnel and resources were demobilized.

EPA continues to coordinate with FEMA, ATF, OSHA, CSB, TCEQ, TDSHS and the Office of the Texas State Chemist on current and potential future site operations.

An official statement of the cause of the incident has not been released. Investigations into the order of events and cause of the explosion are on-going.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

2.2 Planning Section

2.2.1 Anticipated Activities

TCEQ plans to continue air monitoring and response activities.

2.2.1.1 Planned Response Activities

No EPA response activities planned at this time. EPA will continue correspondence with TCEQ, CSB, FEMA, and OSHA and provide assistance as needed.

2.2.1.2 Next Steps

EPA continued correspondence.

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.